

## Arithmetic Practice Test: 8

For Grade-8, 9 and 10 students

Time: 45 minutes

1. The ratio of daily wages of a person "A" and a person "B" is  $5:6$ . They worked together for 7 days and then "A" left the job. Finally, B himself finished the remaining work in 3 days. They were paid a total of \$190 to finish the work. Find their daily wages.
2. A container has a 36 liter of solution of alcohol and water. The ratio of alcohol and water is  $3:1$ . Some amount of solution is taken out and then an equal amount of water is added so that the amount of alcohol and water in the new solution becomes equal. Find the amount of the solution the needs to be taken out?
3. Two glasses of same size contain diluted milk in which the ratio of milk and water are  $7:2$  and  $5:4$  respectively. If we transfer these two glasses of diluted milk into a bigger vessel, what will be the ratio of milk and water in the final solution?
4. Two separate containers A and B have diluted milk in which the ratio of milk and water is  $8:1$  and  $5:1$  respectively. Another container C of capacity 62 liter is filled up completely by taking an equal amount of solution from containers A and B. What will be the ratio of milk and water in the container C?
5. Three containers A, B and C having same capacity. All the three containers have diluted milk. The ratio of milk and water in these containers are  $2:3$ ,  $3:4$  and  $4:5$  respectively. If the milk solutions of all the three containers are transferred into a bigger vessel, what will be the ratio of milk and water in the new vessel?
6. A police chased a thief. The time taken by the police to go his 4 steps is equal to the time taken by the thief to go his 5 steps. The distance travelled by the police in his 3 steps is equal to the distance travelled by the thief in his 4 steps. Find the ratio of their speeds.
7. The ratio of the lengths of 3 sides of a triangle is  $3:4:5$ . The perimeter is 120 meters. Find the area of the triangle.
8. The ratio of numbers of personnel in an army A of a country and in an army B of another country was  $5:8$ . During the war, 1000 personnel from the army A and 1400 personnel from the army B was killed. After the war, the ratio of the number of

personnel in army A and army B became  $3:5$ . What were the numbers of personnel of the army A and army B before the war?

9. A cashbox of a supermarket contains currency notes of \$20, \$10 and \$1 in the ratio of  $4:6:9$  respectively. The total amount of money is \$99 when \$1 currency notes are counted. What is the total amount of money available in the cash box?
10. The ratio of current ages of Sam, Peter and John is  $3:4:7$ . Five years back, their average age was 23 years. Find their current ages.

#### ANSWERS

1. \$10, \$12
2. 12 liter
3.  $2:1$
4.  $31:5$
5.  $401:544$
6.  $16:15$
7. 600 sqm
8. 4000, 6400
9. \$869
10. Sam = 18 years, Peter = 24 years, John = 42 years